

## C. Fleet Replacement And Financing

### *Condition Of The State Vehicle Fleet*

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If the level of employee business travel remains the same, it is critical to control overall expenditures by ensuring that state employees are directed to the lowest cost travel option, state vehicles. This section of the report contains data on the current condition of the fleet, current estimated value of the fleet and financing options.

The State Fleet Information System contains licensed vehicle data for approximately 3,913<sup>1</sup> state vehicles owned by every agency except the Missouri State Highway Patrol and the Departments of Conservation and Transportation. Vehicle acquisition data including the original funding source is captured to help facilitate replacement planning. Data has been divided by funding source (GR or Other) and by two main vehicle categories (passenger and medium/heavy duty). The current and projected condition of both the passenger and medium/heavy duty fleet are presented in the following pages. The table below illustrates the number of vehicles by funding source and vehicle category in the State Fleet Information System.

Vehicle Category	Vehicle Count by Fund		
	GR	Other	All Funds
Passenger	1,630	1,319	2,949
Medium - Heavy Duty	563	401	964
Total	2,193	1,720	3,913

#### *Passenger Vehicles*

The passenger fleet is defined as sedans, light duty trucks, station wagons, SUVs and passenger vans that are subject to a 7- year, 105,000-mile minimum replacement criteria established by State Vehicle Policy (SP-4). Passenger vehicles have a gross vehicle weight rating of less than 8,500 lbs. Agencies must seek preapproval from the State Fleet Manager to purchase passenger vehicles with the exception of those operated by POST certified law enforcement officers.

#### *Condition of the Passenger Vehicle Fleet*

Excluding the Missouri Department of Transportation, Conservation and the Missouri State Highway Patrol, the state fleet contains approximately 2,949 *passenger*<sup>2</sup> type vehicles. General Revenue funded vehicles on average are 1.7 years older and have 21,000 more miles on them than vehicles purchased by other funds.

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<sup>1</sup> Data prepared in August 2005.

<sup>2</sup> Passenger vehicles are defined as light duty sedans, pickups, vans and sport utility vehicles with a gross vehicle weight rating less than 8,500 lbs.

### C. Fleet Replacement And Financing

#### *Condition Of The State Vehicle Fleet*

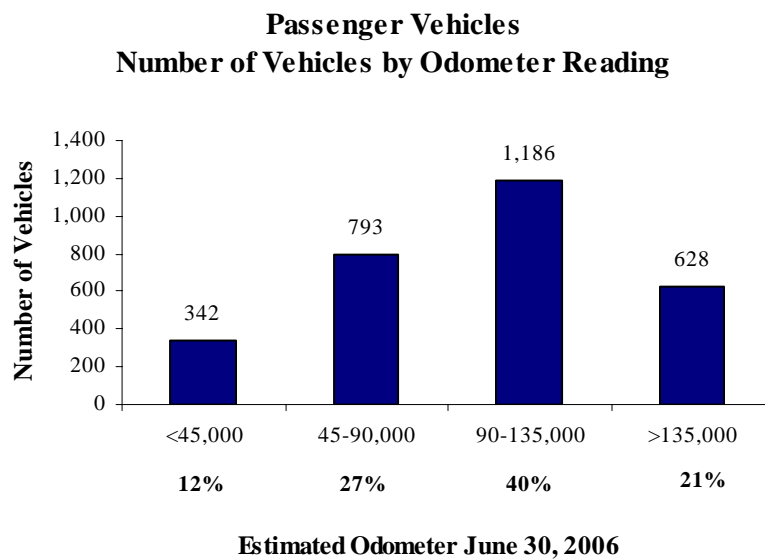
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The average age and odometer readings of these vehicles by funding source are illustrated below are reflective of the actual or projected condition of the fleet at the end of each fiscal year. FY'06 – FY'09 estimates were calculated under the assumption that no further vehicle replacements would take place and vehicles would be utilized to the same degree as they were in FY'05.

<b>Passenger Vehicles Average Odometer and Age by Funding Source</b>						
	<b>Odometer</b>			<b>Age (in years)</b>		
	<b>GR</b>	<b>Other</b>	<b>All Funds</b>	<b>GR</b>	<b>Other</b>	<b>All Funds</b>
<b>FY'05</b>	98,780	77,253	<b>89,152</b>	7.4	5.7	<b>6.7</b>
<b>FY'06*</b>	112,905	90,603	<b>102,377</b>	8.4	6.7	<b>7.7</b>
<b>FY'07*</b>	125,030	103,953	<b>115,602</b>	9.4	7.7	<b>8.7</b>
<b>FY'08*</b>	138,154	117,302	<b>128,827</b>	10.4	8.7	<b>9.7</b>
<b>FY'09*</b>	151,278	130,651	<b>142,052</b>	11.4	9.7	<b>10.7</b>

*\*Projection based on FY'05 utilization and age.*

The chart below illustrates the estimated number of passenger vehicles (all funds) at various mileage ranges at the end of FY'06.



## C. Fleet Replacement And Financing

### *Condition Of The State Vehicle Fleet*

#### *Passenger Fleet Condition by Agency – General Revenue Fund*

The following table illustrates the GR funded passenger vehicle fleet condition estimates for FY'07 by agency. The table is sorted in descending order by the number of vehicles that meet or exceed the minimum replacement criteria of 7 years or 105,000 miles. The average age and odometer illustrated below are only for this universe of vehicles that will meet or exceed the minimum replacement criteria (not the entire fleet).

		FY 07 Estimates for Vehicles that Meet or Exceed 7 Years or 105,000 Miles			
Agency	GR Passenger Vehicle Count	# Vehicles that Meet or Exceed Min Replacement Criteria	% of GR Fleet Eligible for Replacement	Eligible Vehicle Average Age	Eligible Vehicle Average Odometer
Mental Health	527	498	94%	11.2	122,468
Corrections	505	444	88%	9.0	139,420
Public Safety	168	155	92%	8.8	113,721
Social Services	128	126	98%	9.8	147,330
Agriculture	119	116	97%	10.3	140,907
Health & Senior Services	51	42	82%	9	131,019
Revenue	36	27	75%	8.4	125,637
Elementary & Secondary Education	27	23	85%	10.3	133,877
Office of Administration	16	16	100%	12.3	105,908
Attorney General	22	12	55%	5.9	123,730
Secretary of State	11	11	100%	9.6	121,492
Economic Development	8	5	63%	7.4	110,234
State Auditor	4	4	100%	9.3	109,040
Natural Resources	3	3	100%	11.3	126,425
State Treasurer	2	2	100%	11	108,055
Governor	1	1	100%	15	82,231
Higher Education	1	1	100%	7	105,469
Lt. Governor	1	0	0%	N/A	N/A
<b>State</b>	<b>1,630</b>	<b>1,486</b>	<b>91%</b>	<b>9.9</b>	<b>130,342</b>

## C. Fleet Replacement And Financing

### *Condition Of The State Vehicle Fleet*

#### *Passenger Vehicle Replacement Needs – All Funds*

The State Vehicle Policy currently contains a minimum replacement threshold for passenger type vehicles of seven years, 105,000 miles (whichever comes first). The current average odometer reading of vehicles disposed of through State Surplus Property is 126,000 miles.

By the end of FY'06, 73% of the passenger fleet will exceed the 105,000-mile replacement threshold. If this trend continues, over 83% of the passenger fleet will exceed 105,000 miles by the end of FY'07 as presented in the table on the right.<sup>3</sup>

	# Vehicles Over 105,000 Miles	% of Passenger Fleet Over 105,000 Miles
<b>By End of FY'06</b>	2,153	73%
<b>By End of FY'07</b>	2,454	83%
<b>By End of FY'08</b>	2,687	91%
<b>By End of FY'09</b>	2,768	94%

#### *Medium/Heavy Duty Vehicles*

Vehicles that are considered to be medium/heavy duty are not subject to the same minimum replacement criteria as passenger vehicles. Agencies are not required to seek preapproval from the State Fleet Manager for these vehicles in excess of 8,500 lbs. It is difficult for the State Fleet Management Program to estimate the condition or replacement needs of the medium/heavy duty fleet as their normal replacement cycles vary greatly and are primarily dependent upon the function of the vehicle. Data on medium/heavy duty vehicles is included in this document to educate policy makers that there are most likely replacement needs for medium/heavy duty vehicles but State Fleet Management must defer replacement recommendations for these vehicles to state agencies. The condition of the medium/heavy duty vehicle fleet is illustrated below.

<b><i>Medium/Heavy Duty Vehicles Average Odometer and Age by Funding Source</i></b>						
	<b>Odometer</b>			<b>Age (in years)</b>		
	<b>GR</b>	<b>Other</b>	<b>All Funds</b>	<b>GR</b>	<b>Other</b>	<b>All Funds</b>
<b>FY'05</b>	60,658	70,986	64,954	9.5	7.5	<b>8.7</b>
<b>FY'06</b>	66,069	79,988	71,859	10.5	8.5	<b>9.7</b>
<b>FY'07</b>	71,480	88,990	78,764	11.5	9.5	<b>10.7</b>
<b>FY'08</b>	76,891	97,991	85,668	12.5	10.5	<b>11.7</b>
<b>FY'09</b>	82,302	106,993	92,572	13.5	11.5	<b>12.7</b>

<sup>3</sup> Assuming utilization levels are consistent with actual FY'05 usage.

## C. Fleet Replacement And Financing

### *Fleet Value*

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#### *FY 06 Fleet Value*

The FY'06 estimated replacement value for all vehicles in the State Fleet Information System is illustrated below by funding source. Passenger vehicle replacement values were based on state contract pricing.

Medium and heavy-duty replacement values were based on actual original acquisition cost in the State Fleet Information System plus an annual inflator of 3%. These replacement values could be extremely understated given the current average age of 8.5 years of the existing medium/heavy duty fleet. Currently, there is no reliable mechanism to estimate replacement costs of the medium/heavy duty fleet.

	<b>GR</b>	<b>Other</b>	<b>Total</b>
Passenger	\$24.5 M	\$19.9 M	<b>\$44.4 M</b>
Medium-Heavy Duty	\$13.7 M	\$11.3 M	<b>\$25 M</b>
<b>Total</b>	<b>\$38.2 M</b>	<b>\$31.2 M</b>	<b>\$69.4 M</b>

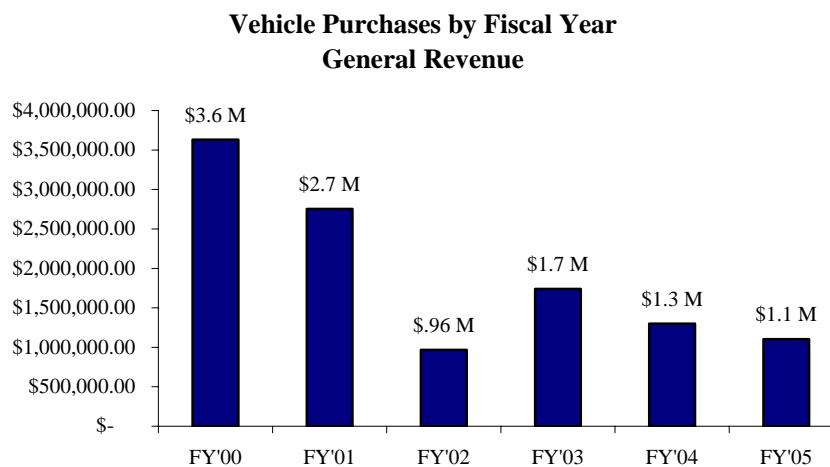
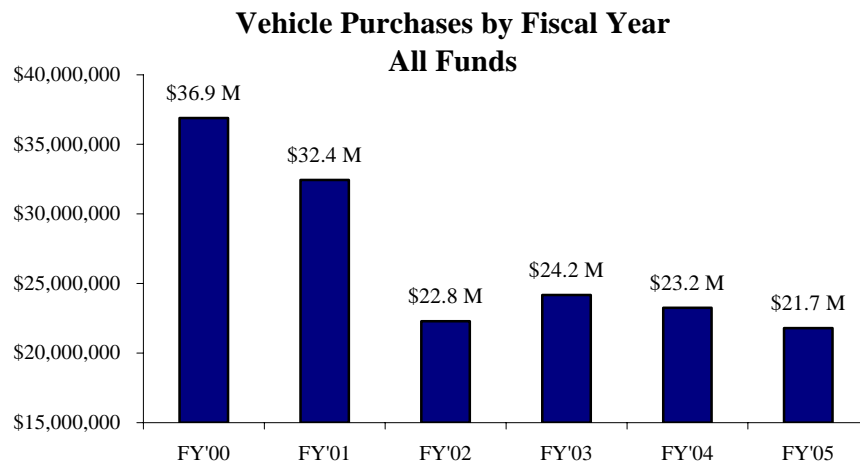
## C. Fleet Replacement And Financing

### *Fleet Replacement*

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#### *Vehicle Replacements Declining*

Vehicle purchases remain suppressed. Agencies replaced approximately 12% of the vehicle fleet annually between 1995 and 2001. In the past four years, only 3 - 5% percent of the vehicle fleet was replaced annually with new vehicles. Ideally, the state should replace 12 – 14% of the fleet each year (7 - 8 year replacement cycle) to avoid large fluctuations in upfront capital required for fleet replacement. The charts below illustrate vehicle purchases by funding source from the SAM II Financial System since FY'00.

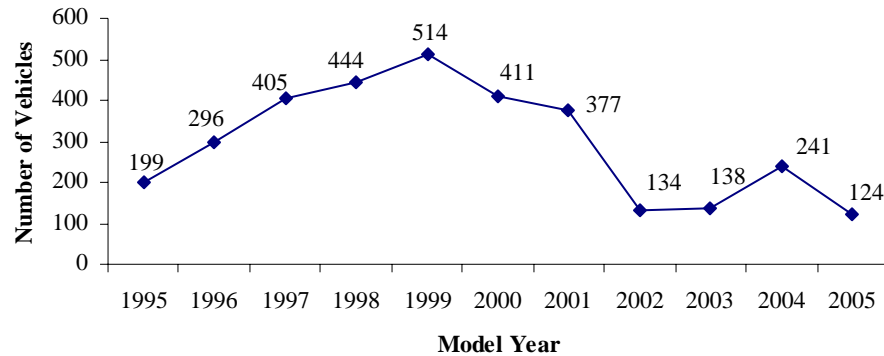


## C. Fleet Replacement And Financing

### *Fleet Replacement*

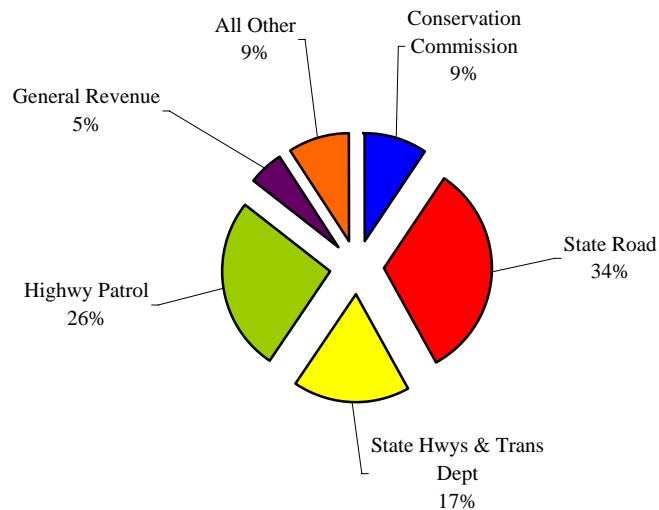
The number of vehicles purchased by model year is illustrated below. This excludes the Departments of Transportation, Conservation and the Missouri State Highway Patrol.

**Number of Vehicles Acquired by Model Year**  
(State Fleet Information System only)



The pie chart below displays vehicle purchases by fund for FY'05.<sup>4</sup>

**FY'05 Vehicle Purchases by Fund**



<sup>4</sup> Data depicted on this page was obtained through the SAM II for object code 2748, vehicles which according to the SAM II Chart of Accounts are defined as the purchase of state automobiles, light trucks and passenger vans for state use.

## C. Fleet Replacement And Financing

### *Fleet Replacement*

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Vehicle purchases by agency are listed below for FY'05.

<b>FY'05 Vehicle Purchases by Agency</b>		
<b>Agency Name</b>	<b>FY'05</b>	<b>% of Total</b>
Public Safety	\$10,295,017	<b>47.2%</b>
Transportation	\$7,108,725	<b>32.6%</b>
Conservation	\$2,052,563	<b>9.4%</b>
Corrections	\$875,929	<b>4.0%</b>
Natural Resources	\$567,399	<b>2.6%</b>
Social Services	\$392,310	<b>1.8%</b>
Economic Development	\$114,858	<b>0.5%</b>
Elementary & Secondary Education	\$86,159	<b>0.4%</b>
Judiciary	\$62,807	<b>0.3%</b>
Agriculture	\$62,539	<b>0.3%</b>
Heath & Senior Services	\$62,100	<b>0.3%</b>
Mental Health	\$28,575	<b>0.1%</b>
Office of Administration	\$27,242	<b>0.1%</b>
Attorney General	\$27,153	<b>0.1%</b>
Public Defender	\$21,915	<b>0.1%</b>
Secretary of State	\$5,489	<b>0.0%</b>
<b>TOTAL</b>	<b>\$21,790,785</b>	



## C. Fleet Replacement And Financing

### *Fleet Financing Options*

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State Fleet Management annually reports the condition of the state vehicle fleet and potential financing options to OA/Budget and Planning. State Fleet Management has researched the costs and benefits of the following fleet financing options:

- State Ownership
- Municipal Leasing
- Closed End Leases
- Short Term Rentals
- Mileage Reimbursement

#### *State Ownership Is The Least Costly Acquisition Option*

Research conducted by State Fleet Management indicates state vehicle ownership is the least costly option at approximately \$.20 per mile to own and operate a typical mid size state-owned sedan.

Other administrative expenses incurred in the management of the fleet are not included but are estimated at approximately \$.015 per mile. For more information on how the state's cost per mile is calculated, see page 27.

#### *Master Municipal Leasing*

Municipal leasing is a viable option utilized by government entities (including the Missouri Department of Transportation) for funding essential equipment purchases. Features of a municipal leasing plan include:

	Cost Per Mile
State Vehicle	\$.20
Municipal Lease <sup>5</sup>	\$.21
Closed End Lease <sup>6</sup>	\$.30
Mileage Reimbursement (FY'06)	\$.375

- Reduced up front capital costs, annual payments made for 3-5 year terms
- No long term debt obligation for the state
- Rates are tax exempt making it more cost effective than closed end lease programs
- No mileage or wear and tear restrictions
- Vehicle is titled and licensed to the State of Missouri during the lease term
- Vehicle is retained by the state at end of lease
- Maintenance and vehicle repair are the responsibility of the state

<sup>5</sup> Based on the State's cost per mile plus interest quoted from Bank of America in October 2005 on a five year lease purchase of a mid size sedan.

<sup>6</sup> Based on a 2005 quote from Enterprise on a 4 year lease for a mid size sedan with a 15,000 mile per year allowance.

## **C. Fleet Replacement And Financing**

### ***Fleet Financing Options***

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In 2005 State Fleet Management worked in conjunction with OA/Purchasing and OA/Accounting to develop a Master Lease RFP for the state. Once awarded in early 2006, this contract will be available as a low-cost financing option for the purchase of state vehicles. The Master Lease will be used to support the Smart Lease Vehicle Program described on page two.

#### ***Closed End Leases***

State Fleet Management estimates the cost for a closed end lease at approximately \$.30 per mile based on a recent quote from Enterprise for a 15,000 mile per year, 48 month term lease for a mid size sedan.

Closed end leasing is less expensive than the upcoming FY'07 state mileage reimbursement rate of \$.415 per mile but far more costly than the Master Municipal Lease option or state ownership. The features of closed end leasing are:

- Established for a specific term
- Annual mileage limits
- Overage mileage charges at end of lease term billed at approximately \$.10 per mile
- Vehicle is returned to lessor at term end
- Abnormal wear and tear charges may apply
- Leasing plan can include all maintenance for an extra charge
- Insurance is available for an extra charge
- Vehicles can be licensed to the State of Missouri during the lease term

#### ***Short Term Rentals***

In 2003, the state awarded a rental services contract with Enterprise Rent-a-Car that offers fixed daily and weekly rates with unlimited miles for daily in-state trips. Short-term daily rentals can be cost effective in certain circumstances, depending on the number of rental days and round trip miles. The use of the rental services contract is increasing and provides a much lower cost option than paying an employee personal mileage reimbursement.

## C. Fleet Replacement And Financing

### *Fleet Financing Options*

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#### *Mileage Reimbursement*

It is in the state's best interest to take a proactive approach in managing mileage reimbursement expenditures. In FY'05, a total of \$15,076,009<sup>7</sup> was expended for employee mileage reimbursement, which accounts for approximately 23% of the total business miles driven by state employees. Mileage reimbursement is the most costly per mile travel option and therefore state agencies should direct as many business miles as possible to state vehicles or short-term rentals. State Fleet Management will continue efforts to promote the *Trip Optimizer* and the Smart Lease Vehicle Program to reduce mileage reimbursement expenses. Additionally, in 2006 a new State Travel Policy will be issued discouraging the use of personal mileage reimbursement.

	Mileage Reimbursement Data <sup>8</sup>				
	(State Employees Only)				
	FY'03	FY'04	FY'05	FY'06*	FY'07*
<b>Reimbursement Rate</b>	\$.335	\$.33	\$.345	\$.375	\$.415
<b>Expenditures</b>	\$14.4 M	\$13.5 M	\$15 M	\$16.4 M	\$18.1 M
<b>Miles Reimbursed</b>	43 M	41 M	43.6 M		

*\*Projection.*

<sup>7</sup> The Commissioner of Administration establishes state mileage reimbursement rates annually effective on July 1 of each year pursuant to Section 33.095 RSMo. 1 CSR 10-11.010 states: "The State mileage allowance rate represents full compensation for the cost of operating your vehicle."

<sup>8</sup> Based on SAM II mileage reimbursement expenditures for state employees only. Miles reimbursed was calculated by dividing total expenditures by the appropriate state reimbursement rate for each fiscal year. FY'06 and FY'07 were projected based on FY'05 actual expenditures.